

REMARKS

This timely responds the Office Action mailed October 2, 2003. Claims 10-12 are currently pending in the application, of which claim 10 is independent.

In view of the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

Rejection Under 35 U.S.C. §102

Claim 10 stands rejected under 35 U.S.C. §102(b) as being anticipated by U. S. Patent No. 5,570,990 issued to Borona, *et al.* ("Borona"). Applicants respectfully traverse this rejection for at least the following reasons.

The claimed invention is directed to solve the problem with the convention substrate transfer systems. Currently, most conventional LCD manufacturing processes are automated and a cassette storing substrates is transferred to a designated processing apparatus by an automated guided vehicle (AGV). A problem arises when a cassette is supposed to be transferred automatically but the operator has to transfer the cassette manually because of unexpected occurrences (e.g., malfunction of the previous processing apparatus, etc.). Since job processes are almost entirely performed automatically, a cassette transferred manually to a process apparatus causes an error in the process apparatus. This increases manufacturing time and decreases overall productivity.

To solve this problem, the claimed invention discloses a method that prevents an error from occurring in the processing apparatus even if a cassette is transferred thereto manually. This is achieved by determining if a cassette is loaded on the port of the process apparatus and determining if the cassette was transferred in the automatic transfer mode. If a cassette is loaded

on the port but there has been no indication that the cassette is supposed to be transferred automatically, the conventional processing apparatus would generate an error message. However, according to the claimed invention, the processing apparatus performs a process instructed by an operator. This reduces the delay caused by an error in a processing apparatus.

In this regard, Borona is directed to a human guided mobile loader stocker which can be also fully automated. As shown in Fig. 4, the loader stocker 110 is a push cart that can be moved by an operator. The operator can control loading and stocking by manipulating a robot hand 112 and robot arms 118 and 124, which are driven by the a motor. Fig. 7 shows the detailed block diagram of the electronics for the mobile loader stocker shown in Fig. 4.

Thus, in Borona, the focus is on the mobile loader stocker itself, which is *quite distant* from a method for preventing an error from occurring in a processing apparatus when a cassette is unexpectedly loaded on a port thereof. More specifically, the Examiner asserted that boxes 221 and 222 in Fig. 7 of Borona somehow disclose the claimed step of performing (a) a predetermined process if the cassette is loaded on the port and the automatic mode signal is received by the processing system **or** (b) a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system.

As previously mentioned, Fig. 7 is a block diagram of the electronics for the mobile loader stocker such as one shown in Fig. 4. It describes how the motor control logic 200 controls the motor 138 such that the shaft 126, the hand 112 and the arms 118 and 124 are moved in response to the operator's manipulation. Particularly, the box 222 is a pulse width modulator which controls the speed of the motor 138 and controlled by the direction/position status signal 221 generated from the motor control logic 200.

Thus, it is submitted that the block diagram of the electronics for the mobile loader stocker shown in Fig. 7 of Borona does not disclose the claimed step of performing a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system. For the reasons above, it is respectfully submitted that claim 10 is patentable over Borona.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §102(b) rejection of claim 10.

Rejections Under 35 U.S.C. §103

Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Borona in view of U. S. Patent No. 6,238,160 issued to Hwang, *et al.* ("Hwang"). Applicants respectfully traverse this rejection for at least the following reasons.

Claims 11 and 12 are dependent from claim 10. As previously mentioned, Applicants believe that claim 10 is patentable over Borona. Hwang is directed to a method for electrostatically chucking a semiconductor wafer but does not disclose or suggest the claimed feature of performing (a) a predetermined process if the cassette is loaded on the port and the automatic mode signal is received by the processing system **or** (b) a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system. Since none of the cited references discloses or suggests this claimed feature, it is respectfully submitted that claim 10 is patentable over Borona and Hwang. Claims 11 and 12 that are dependent from claim 10 would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claims 11 and 12.


CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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